

IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only.

Please CANCEL claims 2, 4, 7, and 9, AMEND claims 1 and 6, and ADD new claims 11 and 12 in accordance with the following:

1. (Currently amended) An exhaust gas purifying system provided with a NO_x occlusion reduction type catalyst having a catalyst metal and a NO_x occluding substance₁ in an exhaust passage of ~~an a diesel engine₁~~ and a control unit comprising a normal control operation means, a regeneration control initiation judging means for detecting a regeneration control initiation timing for said NO_x occlusion reduction type catalyst, ~~and a rich-burn control operation means capable of lowering the concentration of oxygen in the exhaust gas,~~

~~wherein: said rich-burn control operation means for executes executing the a rich-burn control operation for generating an exhaust gas which is in a fuel-rich state₁ by accompanying recirculating recirculation of EGR gas₁ and said control unit comprises a catalyst activation control operation means for executing a control operation for activating said catalyst metal immediately before performing said rich-burn control operation is performed;~~

wherein said catalyst activation control operation means executing a burning control operation in the vicinity of the stoichiometric air/fuel ratio in a range of 0.8 to 1.1 in terms of an excess air factor, in the condition of an EGR valve being totally closed, and at the same time, executing a multi-stage injection and an early injection in the fuel injection into cylinders and an intake control of the diesel engine for controlling the torque generation of the diesel engine.

2. (Cancelled)

3. (Previously presented) The exhaust gas purifying system of claim 1,
wherein: said NO_x occlusion reduction type catalyst comprises a reducer occluding substance.

4. (Cancelled)

5. (Previously presented) The exhaust gas purifying system of claim 1,
wherein: said rich-burn control operation means recirculates EGR gas for generating an exhaust gas which is in a fuel-rich state and controls the torque generated by the engine by controlling the intake air into the engine.

6. (Currently amended) A method of exhaust gas purification to be carried out with use of an exhaust gas purifying system ~~provided with a NO_x occlusion reduction type catalyst having a catalyst metal and a NO_x occluding substance₁ in an exhaust passage of an a diesel engine₁ and~~

a control unit comprising a normal control operation means, a regeneration control initiation judging means for detecting a regeneration control initiation timing for said NO_x occlusion reduction type catalyst, ~~a catalyst activation control operation means and a rich-burn control operation means~~ for executing a control operation for generating an exhaust gas which is in a fuel-rich state, accompanying recirculation of exhaust gas, and capable of lowering the concentration of oxygen in exhaust gas, which comprises performing a catalyst activation control operation by said catalyst activation control operation means for executing a control operation for activating said catalyst metal immediately before said rich-burn operation is performed, and performing a catalyst activation control operation by said catalyst activation control operation means when it is judged by said regeneration control initiation judging means that a regeneration control for the regeneration of the NO_x occlusion reduction type catalyst is to be initiated and thereafter executing a rich-burn control operation accompanying a recirculation of EGR gas by said rich-burn control operation means to thereby regenerate said NO_x occlusion reduction type catalyst, wherein in the course of said catalyst activation control operation, a burning control operation in the vicinity of the stoichiometric air/fuel ratio in the range of 0.8 to 1.1 in terms of an excess fuel factor is performed in the condition of the EGR valve being totally closed, and at the same time, a multi-stage injection and an early injection is executed in the fuel injection into cylinders and an intake control of the diesel engine for controlling the torque generation of the diesel engine is executed.

7. (Cancelled)

8. (Previously presented) The method of exhaust gas purification of claim 6, wherein: said NO_x occlusion reduction type catalyst comprises a reducer occluding substance.

9. (Cancelled)

10. (Previously presented) The method of exhaust gas purification of claim 6, which comprises performing said rich-burn control operation to recirculate EGR gas to generate an exhaust gas which is in a fuel-rich state and to control the torque generated by the engine by controlling the intake air into the engine.

11. (New) An exhaust gas purifying system for an engine comprising:

a NO_x occlusion reduction type catalyst having a catalyst metal and a NO_x occluding substance in an exhaust passage of the engine;

a control unit comprising:

a regeneration control initiation-judging element;

a catalyst activation control operation element;

a rich-burn control operation element adapted to generate an exhaust gas which is fuel-rich; and

wherein said regeneration control initiation-judging element detects a regeneration control initiation timing for said NO_x occlusion reduction type catalyst; wherein said catalyst activation control operation element activates said catalyst metal;

and

wherein said rich-burn control operation element executes a rich-burn control operation to generate said fuel-rich exhaust gas by recirculating EGR gas.

12. (New) A method of exhaust gas purification comprising:

providing a NO_x occlusion reduction type catalyst having a catalyst metal and a NO_x occluding substance in an exhaust passage of an engine;

detecting a regeneration control initiation timing for said NO_x occlusion reduction type catalyst;

judging when a regeneration control for the regeneration of the NO_x occlusion reduction type catalyst is to be initiated;

performing a catalyst activation control operation;

recirculating EGR gas;

lowering a concentration of oxygen in an exhaust gas; and

executing a rich-burn control operation with said rich-burn control operation element to regenerate said NO_x occlusion reduction type catalyst.